

Starter

a $3 \times 3 = 9$

b $3 \times 2 = 6$

c $6 \times 3 = 18$

d $6 \times 6 = 36$

e $3 \times 8 = 24$

f $10 \times 6 = 60$

g $3 \times 9 = 27$

h $6 \times 7 = 42$

i $9 \times 6 = 54$

j $5 \times 6 = 30$

k $8 \times 6 = 48$

l $7 \times 3 = 21$



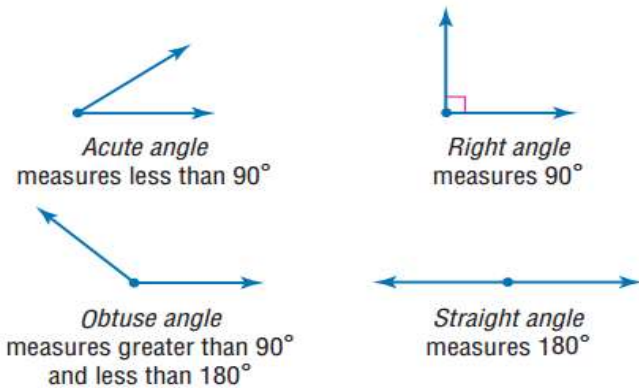
Summer week 6 Lesson 2 – 02.06.20

LO: To reason about angles on a straight line

Success Criteria:

1. Remember there are 180 degrees in a straight line.
2. Look to see what angle / angles you already know.
3. Subtract these amounts from 180 to find the missing angle.

Model



Rhys is measuring angles on a straight line.
 He says:



There are three angles on the line. One is 100° , one is 15° and the other is 55° .

Could he be right? Explain how you know.

Rhys cannot be right because his angles total 170° .

Now complete these:

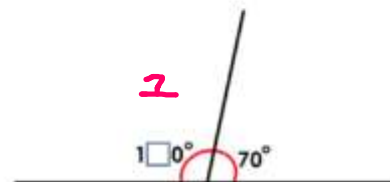
1a. James is measuring angles on a straight line.
 He says:



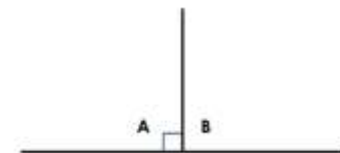
There are two angles on the line. One is 110° and the other is 60° .

Could he be right? Explain how you know.

2a. One of the angles below has lost a digit. What should the missing digit be?



3a. John says angle B is the same as angle A. Do you agree? Explain your answer.



James cannot be right as his angles only total 170° .

John is correct as both angles A and B are 90° angles. Two 90° angles makes 180° .

Canonbury Home Learning
Year 5 Maths

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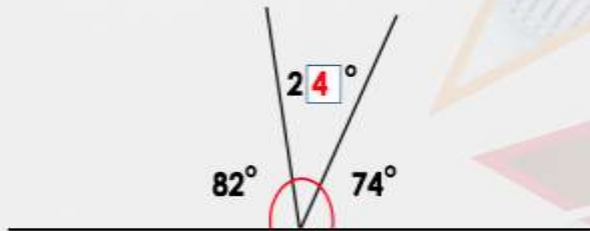
LO: To reason about angles on a straight line

Success Criteria:

- | |
|---|
| 1. Remember there are 180 degrees in a straight line. |
| 2. Look to see what angle / angles you already know. |
| 3. Subtract these amounts from 180 to find the missing angle. |

Model:

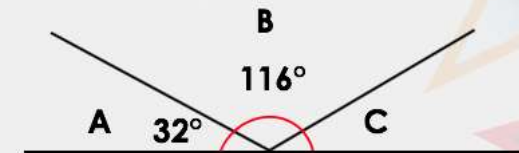
One of the angles below has lost a digit. What should it be?



$$180^\circ - 82^\circ = 98^\circ$$

$$98^\circ - 74^\circ = 24^\circ$$

Tilly says that angle A is the same as Angle C. Do you agree?
Explain your answer.



Angles not drawn to scale.

Tilly is correct because $116^\circ + 32^\circ = 148^\circ$.
 $180^\circ - 148^\circ = 32^\circ$ which is the same as A.

Task 1


4a. Tyler could be right as his angles total

180° .

5a. The missing digit is a 5.

6a. Jim is correct as $60^\circ + 60^\circ = 120^\circ$. $180^\circ - 120^\circ = 60^\circ$ which is the same as angle B and C.

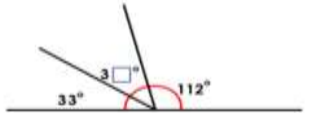
4a. Tyler is measuring angles on a straight line. He says:



There are three angles on the line. One is 110° , one is 10° and the other is 60° .

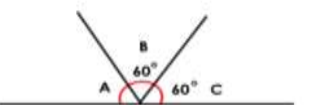
Could he be right? Explain how you know.

5a. One of the angles below has lost a digit. What should the missing digit be?



Angles not drawn to scale

6a. Jim says that angle A is the same as angle B and C. Do you agree? Explain your answer.



Task 2


7a. Eryk cannot be right as his angles total

170° .

8a. The missing digits are a 4 and a 3. 9a.

Pam is correct as one third of $180^\circ = 60^\circ$ so $60^\circ + 60^\circ = 120^\circ$. $180^\circ - 120^\circ = 60^\circ$ which is the same as angle C at 60° .


7a. Eryk is measuring angles on a straight line. He says:



There are three angles on a line. One is 19° , one is a right angle and the other is 61° .

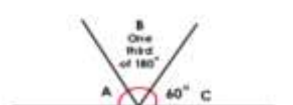
Could he be right? Explain how you know.

8a. Two of the angles below have lost a digit. What should the missing digits be?



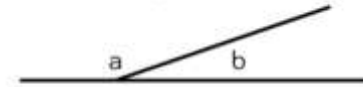
Angles not drawn to scale

9a. Pam says that angle A and B are the same as angle C if each angle is equal. Do you agree? Explain your answer.



Task 3

Here are two angles.



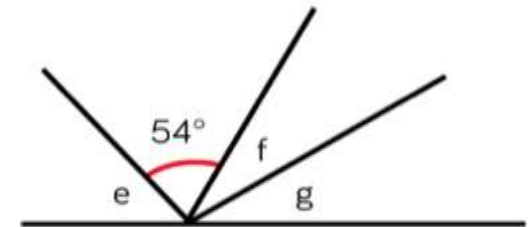
Angle b is a prime number between 40 and 50

Use the clue to calculate what missing angles could be.

$b = 41^\circ, a = 139^\circ$

$b = 43^\circ, a = 137^\circ$

$b = 47^\circ, a = 133^\circ$



- The total of angle f and g are the same as angle e
- Angle e is 9° more than the given angle.
- Angle f is 11° more than the given angle.

$e = 63^\circ$

$f = 37^\circ$

$g = 26^\circ$

Calculate the size of the angles

Create your own straight line and use this one for your partner.